

System And Method For Communicating Simulation Solutions Between Circuit Components In A Hierarchical Data Structure

Abstract of the Disclosure

A system for communicating simulation solutions between circuit components in a hierarchical data structure includes a simulator module having one or more computer programs for representing the circuit as a hierarchically arranged set of branches, which includes a root branch and a plurality of other branches logically organized in a graph. The hierarchically arranged set of branches includes a first branch that contains one or more driver leaf circuits and a second branch that also contains one or more receiver leaf circuits, where the first branch and second branch are interconnected in the graph through a third branch at a higher hierarchical level in the graph than the first and second branches. The simulator module further includes computer programs for simulating operation of the one or more driver leaf circuits and the one or more receiver leaf circuits, together, without simulating operation of the third branch to determine a first set of changes in signal conditions shared by the one or more driver leaf circuits and the one or more receiver leaf circuits.